

EBOLA VIRUS DISEASE (EVD)

Key Points

- North Carolina has been preparing since July for the possibility that a patient in North Carolina might be diagnosed with Ebola.
- Ebola is only spread through unprotected contact with blood or body fluids from someone who is infected, and Ebola is only contagious after the onset of symptoms.
- North Carolina has a strong health care system and a multi-faceted public health preparedness and response infrastructure.
- North Carolinians should take comfort in knowing that our state's public health professionals have extensive training and experience in effectively reducing health risks and responding to outbreaks of communicable diseases in order to protect our citizens.
- NC DPH is working with frontline partners to better establish our most protective approach for PPE for health care workers.
- We have never had Ebola in the United States until recently. As we move through this planning and response we learn and re-evaluate our processes as new information is learned and we update our procedures.

Extensive guidance has been provided by the CDC and the NC DPH to health departments, healthcare providers, hospitals and laboratories on evaluation of patients with recent international travel and on management of suspected cases. North Carolina has a strong public health infrastructure with many trained professionals who are expert in how to work in public health emergency situations.

Ebola – General Information

As of October 15, 2014, there are 8,973 cases of Ebola in West Africa, three cases identified in Texas, one of whom died, and NO cases in North Carolina. In West Africa, the number of cases is doubling approximately every 20 days.

Ebola is only contagious after the onset of symptoms

Sustained by human-to-human transmission

- direct contact (through broken skin or mucous membranes) with the blood, secretions, other bodily fluids of ill people.
- contact with environments contaminated with such fluids.

Incubation period is typically 8 -10 days, but could be as little as 2 day and as long as 21 days

Sudden onset fever intense weakness, muscle pain, headache and sore throat

Followed by vomiting, diarrhea, rash, impaired kidney and liver function

Some cases develop both internal and external bleeding

Authority/lessons learned from smallpox and SARS

- In dealing with the Smallpox and SARS threats that occurred in 2003, DHHS learned what further public health authorities were needed for the state of North Carolina to act swiftly in the face of an infectious disease threat. As a result, North Carolina put in place the public health authorities to:
 - Extend Isolation and Quarantine authority to allow for restriction of movement and activities for up to 30 days and to allow for quarantine of buildings as well as people
 - Increase access to health records to investigate significant public health threats.
- In North Carolina, public health authority can be used without a declaration of emergency.

Key Activities by DHHS since August 2014 include:

Public Health

- Partnering with the NC Poison Control Center, the “NC Ebola Public Info Line” went live on October 13, 2014.
- Provider guidance updated and disseminated October 15, 2014
- Providing ongoing public health consultation to clinicians whenever they suspect a possible case.
- Established Isolation and Quarantine guidelines and model orders for use by local health departments

- DHHS public health teams for Contact Tracing have been established and are deployable
 - Contact tracing interview tools and data management and analysis systems have been developed
 - Training for state and local HD personnel started Oct 13, with over 600 local health department personnel and over 50 state personnel already having completed the first training.
 - Initial training sessions complete and will be recorded for future training.
- Fatality Management Guidance for funeral directors on management of human remains (mortuary management) finalized, widely disseminated and posted on the PH website.
- Memo sent out and posted to website “Disposal of blood and body fluids as regulated medical waste by sanitary sewer systems.”
- DHHS is working with DENR on plans for:
 - Handling Ebola patient waste in the medical setting.
 - Decontamination in the non-medical setting.
- DHHS has established military liaison connections with Fort Bragg Army Womack Medical Center, Navy Medicine Cherry Point/Camp Lejeune and Seymour Johnson Air Force Base. We have identified parameters for information exchange. DoD has well-vetted response plans that have been exchanged.
- A Community Outreach Team has been established and is developing outreach messages for West African communities in N.C. DHHS is coordinating with counties with large West African populations.
- DHHS began coordinating with NC colleges and university in August before the start of the school year.
 - Weekly phone briefings start Monday

- CDC-Division of Global Migration and Quarantine has longstanding protocols in place with all major airline carriers in the US regarding ill passengers that include coordination with local public health.
- Since early August, the CDC has worked with the affected countries (Guinea, Liberia, Sierra Leone and Nigeria) to screen departing travelers. Exit screening might look a little different in each country but contains the same basic elements:
 - All travelers have their temperature taken;
 - Answer questions about their health and exposure history;
 - Are visually assessed for signs of potential illness;
 - Travelers with symptoms or possible exposures to Ebola are separated and assessed further; and
 - This assessment determines whether they are allowed to travel.
- In mid October, the CDC and Customs and Border Protection (CBP) began enhanced entry screening of travelers who have traveled from or through Guinea, Liberia, and Sierra Leone at 5 U.S. airports (JFK, Newark, Washington Dulles, Chicago O'Hare, Atlanta).
 - CBP will give each traveler health information that includes:
 - Information about Ebola
 - Symptoms to look for and what to do if symptoms develop
 - Information for doctors if travelers need to seek medical attention
 - Travelers will undergo screening measures to include:
 - Answer questions to determine potential risk
 - Have their temperature taken
 - Be observed for other symptoms of Ebola
 - If a traveler has a fever or other symptoms or has been exposed to Ebola, CBP will refer to CDC to further evaluate the traveler. CDC will determine whether the traveler:
 - Can continue to travel
 - Is taken to a hospital for evaluation, testing, and treatment
 - Is referred to a local health department for further monitoring and support

- There are well vetted and exercised communicable disease response plans in place for the following North Carolina ports of entry:
 - Charlotte-Douglas International
 - Raleigh Durham International
 - State Maritime Ports in Wilmington and Morehead City
 - The following key partners are involved in these plans in North Carolina:
 - CDC/DGMQ (*airport lead, maritime co-lead*)
 - US Coast Guard (*maritime co-lead*)
 - Customs and Border Protection (Homeland Security)
 - Port officials
 - NC Division of Public Health
 - Local health departments and hospitals
 - Emergency Management, public safety, and EMS

Public Health Lab

- The NC State Laboratory of Public Health is ready to conduct testing for Ebola and has completed the necessary risk assessments, standard operating procedures and other related policies and protocols.
 - It is important to note that testing is not instantaneous. There is an inevitable lapse of time while the specimen is properly and safely packaged, transported and tested. From the time of receipt, it can take six hours to test a single specimen and up to 24 hours for multiple specimens. The State Lab's priority is to properly complete the testing process and assure accurate results.

Health Care

EMS:

- Developed triage and treatment protocols for suspected patients beginning with 911 center call centers through transport to hospitals.
- Developed guidance for proper use of PPE.

- Developing protocols for disposal of waste, scene and ambulance cleanup, and handling of remains.

Hospitals:

- It is the expectation and goal for all hospitals to be prepared to safely triage and provide initial treatment and evaluation of a potential Ebola patient.
- Working with hospitals on planning, training and exercising for triage, treatment and transfer of patients.
- Working with infection control specialists in public health and at the hospitals regarding practices and PPE.
- Developing training programs to assist those that don't have them available.